

IN THE CLAIMS

This listing of claims replaces all prior listings:

1. (Currently Amended) A signal processing apparatus for adjusting levels of continuously arranged signals, said signal processing apparatus comprising:

a designation unit for designating the continuously arranged signals as a signal of attention one by one;

a determination unit for determining a predetermined number of signals preceding the signal of attention designated by the designation unit and a predetermined number of signals following the signal of attention, to be predetermined neighbouring signals;

a weight average unit for averaging by weight the signal of attention and the ~~plurality of~~ predetermined neighbouring signals;

flag setting unit for calculating a difference in levels between the signal of attention and a neighbouring signal, judging whether or not the difference is larger than a predetermined threshold value, and raising flags for the neighbouring signal and another neighbouring signal, the two neighbouring signals arranged symmetrically with respect to the signal of attention, when the difference is judged to be larger than the predetermined threshold value; and

a control unit for controlling and causing the weighted average unit to average by weight the signal of attention and the predetermined neighbouring signals, using the level of the signal of attention instead of the level of each of the neighbouring signal signals for which the flag is flags are raised.

2. (Currently Amended) The signal processing apparatus as described in claim 1, wherein said flag setting unit further raises a flag for a neighboring pixel away, in view of the pixel of attention, from the two neighboring pixels raised with flags.

3. (Previously Presented) The signal processing apparatus as described in claim 1, wherein said signals are pixel values of pixels constituting an image.

4. (Currently Amended) A signal processing method for adjusting levels of continuously arranged signals, said signal processing method comprising:

a designation step of designating continuously arranged signals as a signal of attention one by one;

a determination step of determining a predetermined number of signals preceding the signal of attention designated by way of the designation step, and a predetermined number of signals following the signal of attention, to be predetermined neighbouring signals;

a weight average step of averaging by weight the signal of attention and the ~~plurality of~~ predetermined of neighbouring signals;

a flag setting step of calculating a difference in levels between the signal of attention and a neighbouring signal, judging whether or not the difference is larger than a predetermined threshold value, and raising flags for the neighbouring signal and ~~[[a]] another neighbouring signal~~ which, the two neighbouring signals are arranged symmetrically with respect to the signal of attention, when the difference is judged to be larger than the predetermined threshold value; and

a control step of controlling and causing a process in the weighted average step to average by weight the signal of attention and the predetermined neighbouring signals, using the level of the signal of attention instead of the level of each of the neighbouring signal signals for which ~~the flag is~~ flags are raised.

5. (Currently Amended) A computer readable medium storing a program for adjusting levels of continuously arranged signals, said program comprising:

a designation step of designating continuously arranged signals as a signal of attention one by one;

a determination step of determining a predetermined number of signals preceding the signal of attention designated by way of the designation step, and a predetermined number of signals following the signal of attention, to be predetermined neighbouring signals;

a weight average step of averaging by weight the signal of attention and the ~~plurality of~~ predetermined of neighbouring signals;

a flag setting step of calculating a difference in levels between the signal of attention and a neighbouring signal, judging whether or not the difference is larger than a

predetermined threshold value, and raising flags for the neighbouring signal and a ~~[[a]]~~
another neighbouring signal which, the two neighbouring signals are arranged symmetrically
with respect to the signal of attention, when the difference is judged to be larger than the
predetermined threshold value; and

a control step of controlling and causing a process in the weighted average step to
average by weight the signal of attention and the predetermined neighbouring signals, using
the level of the signal of attention instead of the level of each of the neighbouring signal
signals for which ~~the flag is~~ flags are raised.

6. (Currently Amended) A computer readable medium storing program for
adjusting levels of continuously arranged signals, said program comprising:

a designation step of designating continuously arranged signals as a signal of
attention one by one;

a determination step of determining a predetermined number of signals preceding
the signal of attention designated by way of the designation step, and a predetermined
number of signals following the signal of attention, to be predetermined neighbouring
signals;

a weight average step of averaging by weight the signal of attention and the ~~plurality~~
~~of~~ predetermined of neighbouring signals;

a flag setting step of calculating a difference in levels between the signal of attention
and a neighbouring signal, judging whether or not the difference is larger than a
predetermined threshold value, and raising flags for the neighbouring signal and ~~[[a]]~~ another
neighbouring signal which, the two neighbouring signals are arranged symmetrically with
respect to the signal of attention, when the difference is judged to be larger than the
predetermined threshold value; and

a control step of controlling and causing a process in the weighted average step to
average by weight the signal of attention and the predetermined neighbouring signals, using
the level of the signal of attention instead of the level of each of the neighbouring signal
signals for which ~~the flag is~~ flags are raised.